9pw

PTO/SB/21 (02-04) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Paperwork Reduction Act of 1995, no persons are required to respond t tion of information unless it displays a valid OMB control number. Application Number 10/829.549 TRAD TRANSMITTAL Filing Date April 22, 2004 **FORM** First Named Inventor Junru Jiao Art Unit (to be used for all correspondence after initial filing) **Examiner Name** Attorney Docket Number PGS-03-07US Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance communication Fee Transmittal Form Drawing(s) to Technology Center (TC) Appeal Communication to Board Licensing-related Papers Fee Attached of Appeals and Interferences Appeal Communication to TC Petition Amendment/Reply (Appeal Notice, Brief, Reply Brief) Petition to Convert to a **Proprietary Information** After Final **Provisional Application** Power of Attorney, Revocation Status Letter Affidavits/declaration(s) Change of Correspondence Address Other Enclosure(s) (please Terminal Disclaimer **Extension of Time Request** Identify below): Request for Refund **Express Abandonment Request** CD, Number of CD(s) Information Disclosure Statement Remarks Certified Copy of Priority Other: Document(s) - Transmittal Letter - Cited References Response to Missing Parts/ - Return Postcard Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm E. Eugene Thigpen Individual name Signature Date June 22, 2004 CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. Typed or printed name E. Eugene Thigpen Date June 22, 2004 Signature

This collection of information is required by 37 CFR 1. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1. 14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

§

In re Application of:

Junru Jiao, *et al*.

Serial No.

10/829,549

Filed:

April 22, 2004

Title:

HORIZON-BASED RESIDUAL DEPTH MIGRATION VELOCITY

ANALYSIS

Group Art Unit:

Examiner:

Atty Docket No. PGS-03-07US

Mail Stop DD

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Certificate of Mailing for First Class Mail

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop DD, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

Date: June 22, 2004

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR § 1.97(b)

Sir:

The Applicant respectfully submits herewith an Information Disclosure Statement citing copies of references (C1-C9).

This Information Disclosure Statement is being filed within three months of filing this application.

No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. § 1.16 to 1.21 be deemed

necessary for any reason the Commissioner is authorized to deduct the fees from Petroleum Geo-Services, Inc.'s Deposit Account 50-2223.

Date: June 22, 2004

Respectfully submitted

E. Eugene Thigpen, Reg. No. 27,400

Petroleum Geo Services, Inc. 738 Highway 6 South

Suite 500

Houston, TX 77079

Direct Dial Telephone: 281-679-2288

Substitute for form 1449A/PTO		Atty. Docket No. PGS-03-0	7US	Serial No. 10/829,549
O P E INFORMATION DISCLOSURE ST BY APPLICANT	ATEMENT	Applicants Junru Jiao	o, et al.	Examiner Name Unknown
Page 1 of 2		Filing Date: April 22, 2	004	Group Art:
U.S. Patent Documents See Page 1	Foreign Pa	oreign Patent Documents		Other Art
See Page 1	Se	e Page 2		See Page 2

U.S. Patent Documents

Exam. Init.	Cite No.	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
•	A1				
	A2				
	A3				
	A4				
	A5				
	A6				
	A7				
	A8		-		
	A9				
	A10				
	A11				
	A12				
	A13				
	A14				
	A15				
	A16				
	A17				
	A18				
	A19				
	A20				

Examiner:	Date Considered:	

EXAMINER: initial if reference considered, whether or not citation is in conformance with MPEP609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449A/PTO	Atty. Docket No. PGS-03-07US	Serial No. 10/829,549
P PORMATION DISCLOSURE STA	ATEMENT Applicants Junru Jiao, et a	Examiner Name Unknown
Page 2 of 2	Filing Date: April 22, 2004	Group Art:
TRADES .S. Patent Documents See Page 1	Foreign Patent Documents See Page 2	Other Art See Page 2

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B1			-			
	B2		•				
	В3		• -				
	B4						

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation			
	C1	Stoffa, P.L., Buhl, P., Diebold, J.B., and Wenzel, F., Direct mapping of seismic data to the domain of intercept time and ray parameter – A plane-wave decomposition, Geophysics, 1981, pages 255-267, Vol. 46			
	C2	Al-Yahya, K., Velocity analysis by iterative profile migration, Geophysics, 1989, pages 718-729, Vol. 54			
	C3	Meng, Z., Bleistein, N., and Wyatt, K.D., 3-D Analytical migration velocity analysis I: Two-step velocity estimation by reflector-normal update, 69th Annual International Meeting, Society of Exploration Geophysicists, Expanded Abstracts, 1999, pages 1727-1730			
	C4	Akbar, F.E., Sen, M.K., and Stoffa, P.L., Prestack plane-wave Kirchhoff migration in laterally varying media, Geophysics, 1996, pages 1068-1079, Vol. 61			
	C5	Tanis, M.C., Prestack Split-step Fourier Depth Migration Algorithms and Parallel Implementation on Cray T3E, Ph.D. Dissertation, The University of Texas at Austin, 1998			
	C6	Whitmore, N.D. and Garing, J.D., Internal velocity estimation using iterative prestack depth migration in the constant angle domain, The Leading Edge, 1993, pages 757-762, Vol. 12, No. 7			
_	C7	Deregowski, S.M., Common-offset migrations and velocity analysis, First Break, 1990, pages 225-234, Vol. 8, No. 6			
	C8	Jiao, J., P.L. Stoffa, Sen, M.K., Sen, Seifoullaev, R.K., Residual migration-velocity analysis in the plane-wave domain, Geophysics, 2002, pages 1258-1269, Vol. 67			
	C9	Jiao, J., Residual Migration Velocity Analysis in the Plane Wave Domain: Theory and Applications, Ph.D. Dissertation, The University of Texas at Austin, 2001			

Examiner:	Date Considered:	

EXAMINER: initial if reference considered, whether or not citation is in conformance with MPEP609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.